#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTON COUNTY WATER

DISTRICT NO. 1 (A) FOR AUTHORITY TO ISSUE )

PARITY REVENUE BONDS IN THE APPROXIMATE )

AMOUNT OF \$15,120,000; (B) A CERTIFICATE )

OF CONVENIENCE AND NECESSITY FOR THE )

CONSTRUCTION OF A NEW OHIO RIVER PUMP ) CASE NO. 94-316

STATION AT A COST OF APPROXIMATELY )

\$13,500,000; AND (C) NOTICE OF AN )

ADJUSTMENT OF RATES: AN INCREASE OF )

APPROXIMATELY \$1,798,440 EFFECTIVE )

NOVEMBER 1, 1994

#### ORDER

Kenton County Water District No. 1 ("Kenton District") has applied for authority to issue \$16,945,000 of revenue bonds, for a rate adjustment to increase its normalized annual water revenues by \$2,289,754, and for a Certificate of Public Convenience and Necessity to construct a new pumping station on the Ohio River for its Fort Thomas Water Treatment Plant. By this Order the Commission issues a Certificate of Public Convenience and Necessity for the proposed pumping station, authorizes the proposed bond issuance, and adjusts Kenton District's rates to produce additional annual revenues of \$1,814,505.

Boone County Water and Sewer District ("Boone District"), the cities of Florence ("Florence"), Ludlow ("Ludlow"), and Walton

In its original application, Kenton District applied for authority to issue \$15,120,000 of revenue bonds and for a \$1,798,447 increase in existing rates. It amended its application on March 31, 1995 to reflect the results of the Commission's Order in Case No. 94-056 and changes in proposed construction costs and in interest rates.

("Walton") and the city of Taylor Mill Utilities Commission ("Taylor Mill") have intervened in this matter.

Kenton District filed its application on October 23, 1994. The Commission suspended the proposed rates until April 23, 1995 to investigate their reasonableness. A public hearing on Kenton District's application was held on April 4, 1995. At the conclusion of this hearing, the parties waived their right to submit written briefs and the case was submitted for decision.

# COMMENTARY

Kenton District is a water district organized pursuant to the provisions of Chapter 74. Founded in 1926, it is the oldest and largest water district in the Commonwealth. It serves approximately 65,000 customers in a three county area. It provides retail water service to the residents of Kenton County and wholesale water service to Boone District, Campbell County Kentucky Water District ("Campbell District"), and the cities of Bromley, Florence, Ludlow, Taylor Mill, Walton, Wilder, and Winston Park.

#### OHIO RIVER PUMPING STATION

The pumping station which currently serves Kenton District's Fort Thomas Water Treatment Plant suffers from several deficiencies. Its equipment and design are antiquated. One of the station's two buildings was constructed in the late 1890s. The other was constructed in 1938. Neither building is designed to accommodate modern equipment. Neither has the space for additional equipment or the lifting or material handling devices needed for maintenance and installation activities.

The pumping station's firm capacity of 36 million gallons per day ("MGD") cannot meet the present or expected future demand of Kenton District's Fort Thomas Water Treatment Plant.<sup>2</sup> Moreover, its limited capacity prevents Kenton District from taking full advantage of favorable off-peak electric rates.

The reliability of the station's pumping equipment is questionable. To lubricate the pumping equipment's bearings, the existing station uses a clean water supply which Campbell District provides through a 2-inch water main. During the summer months, this main is unable to meet the pumping equipment's requirements. Moreover, the main's location on an unstable hillside increases the risk of a line break. Even without a landslide occurring, a break or leak in this line would force the shutdown of the pumping station.

The pumping station also has severe hydraulic deficiencies. The size of its piping is inadequate. The existing wet well has caused pump suction problems which in turn have caused premature pump wear and failure. There are several hydraulic bottlenecks in the interconnecting piping between the two buildings.

The existing pumping station's configuration, moreover, does not permit the installation of the chemical and mechanical equipment needed to address the growing problem of zebra mussels. Kenton District expects problems with blockage of the pumping station's intake to increase as a result.

The Fort Thomas Water Treatment Plant has a current capacity of 44 MGD and can be expanded to 60 MGD.

Improvements to the existing pumping station are neither practical nor possible. The pumping station cannot operate during any refurbishing. As the pumping station provides approximately 85 percent of Kenton District's water, Kenton District cannot meet its system demand if the pumping station is taken out of service.

Based upon these facts, the Commission finds that the public convenience and necessity require construction of the proposed pumping station to replace Kenton District's existing pumping station.

### PROPOSED FINANCING

Kenton District seeks authorization to issue \$16,945,000 of revenue bonds. The proceeds of this bond issuance will finance the construction of Kenton District's proposed Ohio River Pump Station. The Commission finds that the proposed bond issuance is consistent with the proper provision of utility service and should be authorized.

#### TEST\_PERIOD

Kenton District proposes to use the 12-month period ending December 31, 1993 as the test period for determining the reasonableness of the proposed rates. The Commission previously used this period to determine the reasonableness of Kenton District's proposed rates in Case No. 94-056. Kenton District

Case No. 94-056, Application of Kenton County Water District No. 1 (A) for Authority to Issue Parity Revenue Bonds in the Approximate Principal Amount of \$7,315,000 for the Purpose of Refunding Bond Anticipation Notes and for Other Needs; and (B) Notice of an Adjustment in Water Rates: An Increase of Approximately \$1,834,000 Effective May 1, 1994, (Jan. 27, 1995).

proposes to use the Commission's findings in that proceeding as the basis for pro forma adjustments in this proceeding. The Commission accepts this proposal.

# REVENUES AND EXPENSES

In Case No. 94-056, the Commission found Kenton District's test period operating income was \$2,756,449. Kenton District proposes several adjustments to test-year operations to reflect proforma changes resulting from the construction and operation of the new pump station. The Commission finds that those adjustments related to depreciation expense and other income are reasonable and in accordance with accepted rate-making principles. The remaining adjustments proposed by Kenton District are discussed below.

# Revenues from Water Sales

In Case No. 94-056, the Commission found that Kenton District had adjusted operating revenues of \$13,152,1676 during the test period. As the Commission established new rates in that case which will generate additional revenues of \$1,960,167, the Commission finds that Kenton District's adjusted operating revenues from water sales are \$15,112,334.7

In Case No. 94-056, the Commission, citing the uncertainty about the validity of Kenton District's purchased water contracts with Campbell District, declined to impute to Kenton District any

Supplemental Testimony of Dennis Willaman at 2.

Case No. 94-056, Order of Jan. 27, 1995, at 9.

<sup>6 &</sup>lt;u>Id.</u>

<sup>&</sup>lt;sup>7</sup> \$13,152,167 + \$1,960,167 = \$15,112,334

additional revenues which would result from the implementation of those contracts. It found that, should Kenton District prove successful in its litigation with Campbell District, an adjustment of rates would be necessary. To that end, the Commission required Kenton District to report quarterly on the litigation's status and its sales to Campbell District. The Commission finds no need to change that ruling at this time.

### Operation and Maintenance Expense

During the test period, Kenton District incurred operations and maintenance expense of \$694,808 for its existing Ohio River Pumping Station. It proposes to increase this expense by \$160,192 to \$855,000 to reflect costs associated with the new pumping station. The total expense involves three components: purchased power, chemicals, and plant maintenance.

<u>Purchased Power Expense</u>. During the test period, Kenton District incurred purchased power expense of \$389,263 for the Ohio River pumping station. It proposes to increase this expense by \$414,737 to reflect the new pumping station's power consumption.

The record fails to support the proposed adjustment. Although the new pumping station will be slightly less efficient than the existing pumping station, the project engineer testified that no

8	Purchased Power Chemicals Maintenance	\$803,000 24,800 <u>24,000</u>
	Total	\$851,800

<u>See</u> Kenton District's Response to the Commission's Order of January 20, 1995, Item 3b.

significant increase in energy usage will occur. He further testified that, because of the new plant's increased pumping capacity, Kenton District will be able to take full advantage of The Union Light Heat and Power's ("ULH&P") off-peak rates and should therefore be able to reduce its purchased power costs. 10

The proposed adjustment is not consistent with Kenton District's current energy usage. In 1993 the existing Ohio River Pumping Station's electric bill was only \$389,263. In 1994 Kenton District's total purchased power expense for the Ohio River and Licking River Pumping Stations was only \$533,513. The proposed purchased power expense for the new pumping station alone is \$803,000. In essence, Kenton District proposes to pay \$269,487 more in energy costs to operate one pumping station than it currently pays to operate both of its pumping stations. As the new Ohio River Pumping Station will not be pumping any more water than the existing one, the adjustment appears unreasonable.

Finally, the basis for the proposed adjustment is unknown.

Kenton District does not identify the electric rate used to

T.E. at 88.

Id. at 89. By operating its existing Ohio River pumping station only during off-peak hours, Kenton District achieves a monthly savings of \$4,000. Because of the existing station's capacity, Kenton District operates only during off-peak hours for eight months of the year. See Letter of January 23, 1995 from John N. Hughes to Don Mills, Exhibit 1 at 2. Absent unusual circumstances, the annual savings in electric power costs resulting from the new pumping station's larger pumping capacity should be approximately \$16,000.

Annual Report of Kenton County Water District No. 1 for the year ended December 31, 1994, at 30.

calculate the proposed adjustment. Its project engineer conceded the rate used to calculate the adjustment was a projection based on assumed increases for ULH&P. ULH&P has not applied for such increases. No evidence exists that such an application is likely. Moreover, Kenton District has not supplied the assumed rate of increase for ULH&P's rates.

Accordingly, the Commission finds that the proposed adjustment should be rejected and that purchased power expense should be based on the test period expense of \$389,263.

Chemicals Expense. Kenton District proposes to include chemicals expense of \$22,300 for potassium permaganate and \$2,500 for sodium hypochlorite in its pro forma operations. These expenses, however, are already reflected in the test period chemicals expenses. The project engineer testified at hearing that the anticipated usage of potassium permaganate is equal to Kenton District's test year usage at the existing plant. This expense is included in Kenton District's test year operations as a component of water treatment chemicals expense. While Kenton District has not previously used sodium hypochlorite, this chemical will replace gaseous chlorine which Kenton District currently uses. The estimated cost of the sodium hypochlorite is based on a minimum delivery of gaseous chlorine for a year. As a result, this expense is also included in Kenton District's test period chemicals

<sup>&</sup>lt;sup>12</sup> T.E. at 93.

<sup>13 &</sup>lt;u>Id.</u> at 49.

expense. The Commission, therefore, finds that the proposed adjustment should be denied.

Maintenance Expense. Kenton District calculated its proposed maintenance expense for the new pump station based on an industry standard of 0.2 percent of the pumping station's estimated capital cost. Its proposed adjustment of \$24,000 is based upon an estimated capital cost of \$12 million. Based on the revised construction cost of \$13,690,000, the Commission finds that the adjustment should be increased to \$27,380.

As a result of these adjustments, the Commission has decreased test year operation and maintenance expense for the Ohio River Pump Station by \$278,155.17

### Amortization of Debt Discount and Expense

Kenton District proposes to include Other Expense of \$101,508, for the amortization of debt discount and expense. The proposed adjustment results in double recovery of expenses for bond discounts and the cost of bond issuance. As these expenses are

 $<sup>$13,690,000 \</sup>times .002 = $27,380$ 

17	Purchased Power Expense Chemicals Expense Maintenance Expense	\$389,263 -0- <u>27,380</u>		
	Allowed O & M Expense Less: Test Year Expense	\$416,643 _694,798		
	Decrease	(\$278.155)		

<sup>&</sup>lt;sup>14</sup> T.E. at 94.

<sup>15</sup> Kenton District's Exhibit G (Revised), at 2.

paid from bond proceeds, 18 they are recovered through the debt service portion of Kenton District's revenue requirement. Notwithstanding Kenton District's arguments to the contrary, the Commission further finds that the amortization of debt discounts and issuance cost is not analogous to depreciation on utility plant and equipment and that the proposed adjustment should therefore be denied.

#### Summary

Based on the above, Kenton District's test-year operations appear as follows:

	<u>Test Year</u>	Commission Adjustments	Test Year Adjusted
Operating Revenues Operating Expenses	\$15,112,334 10,395,718	\$ -0- ( <u>26,488)</u>	\$15,112,334 10,369,230
Operating Income	\$ 4,716,616	\$ 26,488	\$ 4,743,104
Other Income Other Deductions	443,184 81,424	( 37,255) ( <u>81,424)</u>	405,929 
Income Available for Debt Service	\$ 5,078,376	\$ 70,657	\$ 5,149,033

# REVENUE REQUIREMENT DETERMINATION

Average Annual Debt Service Requirement. Kenton District proposes an average annual debt service requirement of \$5,906,402. Kenton District's proposal includes debt service for Kenton District's FmHA Series 1995B Bonds. A separate surcharge assessed directly on SubDistrict B customers already covers debt

<sup>&</sup>lt;sup>19</sup> T.E. at 52-54.

<sup>&</sup>lt;sup>19</sup> T.E. at 38.

service for these bonds.<sup>20</sup> The Commission, therefore, finds that the FmHA Series 1995B Bonds should be excluded from the calculation of Kenton District's debt service requirement and that Kenton District's average annual debt service requirement is \$5,809,240.<sup>21</sup>

Bond Procurement Income. Kenton District proposes to include bond procurement income of \$188,750 as a component of its revenue requirement. Despite its proposal, it argued at hearing that bond procurement income should not be used to determine revenue requirements because such income is short lived.<sup>22</sup> While the Commission agrees that bond procurement income is short lived, we find that the ratepayers should receive the benefit of this income. Therefore, for ratemaking purposes, the Commission has amortized

Case No. 94-409, Notice and Application of Kenton County Water District No. 1 to Construct an Extension to Serve Approximately 175 Customers, and to Institute a Surcharge Under KRS 278.023 with No Change in Basic Water Rates, in Sub-District B (Jan. 26, 1995).

Year 1996 1997 1998 1999 2000		Projected Total Parity Debt \$5,890,044 5,900,650 5,913,781 5,912,571 5,914,963	Projected FmHA Series 1995B \$ 89,155 89,155 102,500 102,500 102,500	Commission Adjusted Total \$ 5,800,889 5,811,495 5,811,281 5,810,071 5,812,463
				\$29,046,199 <u>+ 5</u>
	Average	Annual Debt Service		\$ 5,809,240

<sup>&</sup>lt;sup>22</sup> T.E. at 56.

the bond procurement income over the life of the bonds, resulting in a decrease to Kenton District's revenue requirement of \$7,550.23

Revenue Requirement Calculation. The Commission finds Kenton District's annual revenue requirement to be \$17,332,768.<sup>24</sup> To achieve a level of income sufficient to meet its reasonable expenses and debt service, the Commission further finds that Kenton District's rates should be adjusted to produce additional annual revenues of \$1,814,505.<sup>25</sup>

# RATE DESIGN

Kenton District proposes a 15 percent across the board increase to its rates. With the exception of the customer charge, the Commission accepts this allocation of the increase. The expenses allocated to the customer charge in Kenton District's last general rate case have not significantly increased. The Commission has, therefore, increased the customer charge by 64 cents only to recover the increased cost of providing the 600 cubic feet usage allowance included in the customer charge.

23	\$188,750 + 25 years = \$7,550	
24	Adjusted Operating Expenses Average Annual Debt Service (1995 - 1999) 20% Debt Service Coverage Less: Bond Procurement Income Other Expense	\$10,369,230 5,809,240 1,161,848 7,550
	Total Revenue Requirement	\$17,332,768
25	Total Revenue Requirement Less: Adjusted Operating Revenues Other Income	\$17,332,768 15,112,334 405,929
	Revenue Increase Required	\$ 1,814,505

#### SUMMARY

After review of the evidence of record and being otherwise sufficiently advised, the Commission finds that:

- 1. The public convenience and necessity require the construction of the proposed Ohio River Pumping Station.
- 2. The proposed issuance of \$16,945,000 of revenue bonds is for the lawful objects within Kenton District's corporate purposes, is necessary and appropriate for and consistent with the proper performance by Kenton District of its service to the public, and will not impair its ability to perform that service.
- 3. The rates in Appendix A, which is attached hereto and incorporated herein, are the fair, just, and reasonable rates for Kenton District and will produce annual revenues of \$16,926,839 based on adjusted test year sales.
- 4. The rates proposed by Kenton District are unjust and unreasonable and should be denied.

### IT IS THEREFORE ORDERED that:

- 1. Kenton District is granted a Certificate of Public Convenience and Necessity to proceed with the proposed construction as set forth in its application.
- 2. Kenton District shall not deviate from the construction approved without prior Commission approval.
- 3. Kenton District shall obtain Commission approval before performing any additional construction not expressly authorized herein.

- 4. Kenton District shall file a copy of the "as-built" drawings and a certified statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the substantial completion of the proposed construction project.
- 5. Kenton District shall ensure that construction inspection is under the general supervision of a professional engineer with a Kentucky registration in civil or mechanical engineering to ensure that the construction work is done in accordance with the contract plans and specifications and in conformance with the best practices of the construction trades involved in the project.
- 6. Kenton District shall provide the total costs of the proposed project, including the cost of construction and all other capitalized costs (e.g. engineering, legal, administrative) within 60 days of the project's completion. Construction costs should be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for Water Utilities.
- 7. Kenton District is authorized to issue revenue bonds in the principal amount of \$16,945,000. The proceeds of this issuance shall be used only for the lawful purposes specified in Kenton District's application.
  - 8. The rates proposed by Kenton District are hereby denied.
- 9. The rates set forth in Appendix A are approved for service rendered by Kenton District on and after the date of this Order.

10. Within 20 days of the date of this Order, Kenton District shall file with the Commission revised tariff sheets setting forth the rates approved herein.

Nothing contained herein shall be deemed a warranty or finding of value of securities or financing authorized herein on the part of the Commonwealth of Kentucky or any agency thereof.

Done at Frankfort, Kentucky, this 1st day of June, 1995.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Commissioner

ATTEST:

Executive Director

#### APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 94-316 DATED June 1,1995.

The following rates and charges are prescribed for the customers in the area served by Kenton County Water District No. 1. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

# Monthly Retail Rates

First	200	cubic	feet	See Fi	.xed	Serv	rice Cl	narge
Next	1,300	cubic	feet	\$1.75	per	100	cubic	feet
Next	163,500	cubic	feet	1.51	per	100	cubic	feet
Over	165,000	cubic	feet	. 92	per	100	cubic	feet

# <u>Ouarterly Retail Rates</u>

First	600	cubic	feet	See Fixed Service Charge
Next	3,900	cubic	feet	\$1.75 per 100 cubic feet
Next	490,500	cubic	feet	1.51 per 100 cubic feet
Over	495,000	cubic	feet	.92 per 100 cubic feet

### Wholesale Rate

All	Usage	per	1,000	gallons	\$1.46
	bell (			_	1.32

### <u>Ouarterly Customer Charges</u>

<u>Meter Size</u>	<u>Ch</u>	arge
5/8 3/4 1	\$	16.54 21.92 32.67
1-1/2 2		59.54 91.79
3 4 6		167.04 274.54 543.29
8 10 12		865.79 ,349.54 ,779.54